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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,709	08/12/2003	Chiou-muh Jong		1708

33847 7590 10/18/2005

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EXAMINER	
WANG, JIN CHENG	

ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,709	JONG, CHIOU-MUH	
	Examiner	Art Unit	
	Jin-Cheng Wang	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,14,16 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,14,16 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's submission filed on 07/12/2005 has been entered. Claims 1-8, 14, 16 have been amended. Claims 9-13, 15, and 17 have been canceled. Claim 18 has been newly added. Claims 1-8, 14, 16 and 18 are pending in the application.

Response to Arguments

Applicant's arguments filed July 12, 2005 have been fully considered but are moot in view of the new ground(s) of rejection set forth in the present Office Action based on Yamauchi et al. U.S. Patent No. 6,140,565 (hereinafter Yamauchi) in view of Kaluza U.S. Patent No. 5,881,471 (hereinafter Kaluza) and Cheiky et al. U.S. Patent No. 6,919,892 (hereinafter Cheiky).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 2, the phrase "but not limited to" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). The claims 2-8 depend upon the claim 1 and are rejected due to their dependency on the claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 14, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al. U.S. Patent No. 6,140,565 (hereinafter Yamauchi) in view of Kaluza U.S. Patent No. 5,881,471 (hereinafter Kaluza) and Cheiky et al. U.S. Patent No. 6,919,892 (hereinafter Cheiky).

Claim 1:

Yamauchi teaches a method to simulate an outdoor scene visible window for a windowless room comprising:

Receiving a sequence of images from a source (e.g., Receiving a sequence of the images from the memories; column 13, lines 49-67 and column 14, lines 1-41; the images relating to the music performance scene may be actually performed taken from the outdoor scenes);

Creating a window covering image which is a simulation of a window covering at a certain openness and position of user's preferences (*e.g., column 21, lines 20-35 and column 22, lines 15-20 in which Yamauchi discloses creating the color of curtains in the scenery setting and props in accordance to the selected automatic backing style and according to the selected reverberation type, the apparatus may adopt a performance situation image designed after a hall*

or a stage and a performance situation image having no curtain at all or with curtains and the apparatus can select performance situation images having different depth and widths. In Fig. 21, Yamauchi discloses the three-dimensional image drawn between open curtains 131 which are different from those shown in Fig. 20 in color and pattern and the stage 132 is imaged after a concert hall having a wooden floor and wooden walls. In that the open space between the curtains constitutes a window covering and the virtual setting or the scenery setting having the curtains constitutes the window covering in accordance to the styles of backing or accompaniment classified by the user's preference to classical, jazz, dancing and folk etc. column 21, lines 15-67 and column 22, lines 1-29);

Creating a fixed window image which is a simulation of a real window with window structure includes window edges and window grid (*e.g., column 21, lines 20-35 and column 22, lines 15-20 in which Yamauchi discloses creating the color of curtains in the scenery setting and props in accordance to the selected automatic backing style and according to the selected reverberation type, the apparatus may adopt a performance situation image designed after a hall or a stage and a performance situation image having no curtain at all or with curtains and the apparatus can select performance situation images having different depth and widths. In Fig. 21, Yamauchi discloses the three-dimensional image drawn between open curtains 131 which are different from those shown in Fig. 20 in color and pattern and the stage 132 is imaged after a concert hall having a wooden floor and wooden walls. In that the open space between the curtains constitutes a window and the virtual setting or the scenery setting constitutes the window covering in accordance to the styles of backing or accompaniment classified by the*

user's preference to classical, jazz, dancing and folk etc. column 21, lines 15-67 and column 22, lines 1-29);

Superimposing a curtain image on the fixed window image to form a static image (*Superimposing a curtain image as shown in Figs. 20-22 with the scenery backing styles, stage effects or the performance situation images as the background images including the window edges and grids forming the background scenery setting wherein the backing styles and stage effects and curtain color can be selected by the user through icons and pop-up menus; see column 26, lines 32-38; and thereby synthesizing the visual image of the music system with the performance situation images having player icons arranged; column 21-22*);

Combining current frame of said outdoor images with said static image to form an instant simulation image (*e.g., displaying the sequence of images representing the sequences of motions of the conductor and these stored images are read out to be sequentially changed and thereby imparting a sequence of motions to each icon; column 25, lines 52-67 and column 26, lines 1-37*);

Said instant simulation image is a simulation of the look of a real window with said window covering (*real scenery performance situation image simulating a real stage in the application window wherein the stage has curtains, edges, window covering and thus simulating the real stage window with stage covering and the set of images representing the excited audience are sequentially displayed, enhances the feeling of being at a live performance*);

Updating said instant simulation image at a frequency of designer's choice (*e.g., 30 frames per second; column 26*);

Updating said instant simulation image when either said openness or said position of said window covering image is changed (*the apparatus can create performance situation images according to the combinations of the automatic backing styles and reverberation types including no reverberation, hall reverberation and stage reverberation. The color of curtains in the scenery setting and props such as a speaker box may be changed according to the selected automatic backing style, i.e., the window covering environment is changed and the apparatus can select performance situation images having different depths and different widths; see column 21-22*); and

Displaying said instant simulation image (*Figs. 20-22 and column 18 and 22*).

Yamauchi does not explicitly discloses a number of terms such as "outdoor images", Yamauchi however implicitly discloses receiving a sequence of the images from the memories; column 13, lines 49-67 and column 14, lines 1-41; wherein the images relating to the music performance scene may be actually performed in a outdoor setting. Although Yamauchi does not explicitly disclose the term "window covering", Yamauchi discloses scenery setting in matching with the acoustic effect in the performance of the music system wherein the scenery setting describes the stage or hall image setting covering the opening or window between the curtains. Although Yamauchi does not explicitly discloses creating a fixed window image which is a simulation of a real window with window structure includes window edges and window grid, Yamauch discloses scenery setting in matching with the stage effect in the performance of the music system to synthesize the visual image of the music system including synthesizing the conductor image and the musician image, the curtain image and the music situation or the scenery setting image in which the image data synthesizing block 4 of Fig. 1 operates according

to the icon image data of each performance part and the image data representing the scenery setting for creating **a composite image** in which the icons representing the performance parts are arranged in the image representing **the virtual scenery** setting and outs the created image onto a monitor display. For example the image 11 of Fig. 2 represents the virtual scenery setting of the music system in a simulated manner such as a performance stage or a performance hall and the user can color and design the image 11 according to a music genre to be performed by the music system (column 7, lines 29-67). For example, for a classical music piece, the user can use a scenery picture with **shapes, colors and textures of curtains** and floors of the performance stage and props all selected in matching with the image of the classical music piece. Because the floors and props of the performance stage on the window may have grids and edges on the performance window, Yamauchi suggests the claim limitation of a fixed window image which is a simulation of a real window (a real stage between the curtains presenting a window to the viewers) with the real stage structure having floor grids, stage props, stage edges similar to the real window grids and edges. It would have been obvious to have replaced the stage window in a hall having the grids and edges with the real window of the hall having grids and edges because such images can be conveniently constructed at the time of the invention was made by taking the photograph of a real window having the specific material setting using the digital camera to form a virtual scenery setting as input to the image data synthesizing block 4 of Fig. 1 to generate a composite image. One of the ordinary skill in the art would have been motivated to do this to visualize a situation and environment in which the music system should be played with the specific style in a virtual environment (column 7).

With regards to the newly amended claim limitation of "analyzing structure of outdoor windows of at least two different styles for storing window data representing said outdoor windows in a memory device, said data is characterized by window parameters, which include enumerated values of, but not limited to grid numbers, color of frame, frame styles and sizes of said outdoor windows; user controllable construction/reconstruction of fixed window image of chosen outdoor window from said window parameters stored in said memory device; analyzing structure of window coverings of at least two different types/styles for storing window covering data representing leaves at various openness angles together with various end leaf positions representing various leaf covering ratios, and by window covering parameters, which include numerated values of, but not limited to types, styles, colors, sizes, pleat numbers and leaf numbers of said window coverings; user controllable construction/reconstruction of window covering image for chosen window covering opened with user's desired covering ratio from said window covering data stored in said memory device", the newly cited references Cheiky in combination with Kaluza meet the claim limitation cited in above for the reasons given below. Kalyza discloses in Figs. 1-56 various types and styles of window treatments and photos of these window treatments may be taken using Cheiky's video camera to provide images/pictures/photos for the various types, styles, sizes, colors of the window treatments of Kalyza and the taken pictures can be aligned and mixed with a template image of choice and thus creating a user controllable image of the window covering.

With regards to the claim limitation of superimposing said window covering image on said fixed window image to form a static image, the newly cited references discloses

superimposing the window treatment image on a template image which is a fixed image (See Cheiky's abstract).

The amended claim 1 further recites "detecting new position of human motion of a person closest to a motion detector; creating a sequence of segmented outdoor scene images by remotely orienting a controllable motor-driven video camera at location of interest according to human motion detected by said motion detector, or creating said sequence of segmented outdoor scene images by segmenting each frame of available outdoor scene images from any source based on said new position of human motion. However, Cheiky discloses a video camera taking images of a person talking and the animated images are then displayed over the internet. The video camera of Cheiky can be used as a motion detection device for capturing human motion of a person and the sequence of the video images thus captured can be presented over the internet.

With regards to the claim limitation of "combining each frame of said sequence of partial outdoor images with said static image to form sequence of instant simulation images, displaying said sequence of instant simulation images on a flat monitor mounting on a wall, and updating said sequence of instant simulation images in response to change in said partial outdoor images as a consequence of the human movement detected by said motion detector", Yamauchi discloses receiving a sequence of the images from the memories; column 13, lines 49-67 and column 14, lines 1-41; wherein the images relating to the music performance scene may be actually performed in a outdoor setting and taken by a video camera of Cheiky. Yamauch discloses scenery setting in matching with the stage effect in the performance of the music system to synthesize the visual image of the music system including synthesizing the conductor image and the musician image, the curtain image and the music situation or the scenery setting

image in which the image data synthesizing block 4 of Fig. 1 operates according to the icon image data of each performance part and the image data representing the scenery setting for creating **a composite image** in which the icons representing the performance parts are arranged in the image representing **the virtual scenery** setting and outs the created image onto a monitor display. For example the image 11 of Fig. 2 represents the virtual scenery setting of the music system in a simulated manner such as a performance stage or a performance hall and the user can color and design the image 11 according to a music genre to be performed by the music system (column 7, lines 29-67). For example, for a classical music piece, the user can use a scenery picture with **shapes, colors and textures of curtains** and floors of the performance stage and props all selected in matching with the image of the classical music piece. Because the floors and props of the performance stage on the window may have grids and edges on the performance window, Yamauchi suggests the claim limitation of a fixed window image which is a simulation of a real window (a real stage between the curtains presenting a window to the viewers) with the real stage structure having floor grids, stage props, stage edges similar to the real window grids and edges. It would have been obvious to have replaced the stage window in a hall having the grids and edges with the real window of the hall having grids and edges because such images can be conveniently constructed at the time of the invention was made by taking the photograph of a real window having the specific material setting using the digital camera to form a virtual scenery setting as input to the image data synthesizing block 4 of Fig. 1 to generate a composite image. One of the ordinary skill in the art would have been motivated to do this to visualize a situation and environment in which the music system should be played with the specific style in a virtual environment (column 7 and 13-14).

Therefore, having the combined teaching of Yamauchi, Kaluza and Cheiky as a whole, one of ordinary skill in the art would have found it obvious to modify curtain images of Yamauchi using the window covering images taken by Cheiky from Kaluza's real window treatments to form different styles and types of window treatments as fixed image templates selectable by the user in accordance with the classification of the window treatment parameters or the animation parameters because Yamauchi discloses selecting different shapes, colors and textures of curtains for the performance stages.

Doing so would enable a user to select from a large variety of window treatments as a template to be superimposed on the photo of a person talking or performing the music on the stages in a virtual environment (Yamauchi column 7, 13-14, Cheiky Fig. 1 and Kaluza Figs. 1-56).

Claim 2:

However, Yamauch, Cheiky and Kaluza further disclose the claim limitations that said window coverings are classified into: leaf window coverings characterized as having leaves, wherein the controlling operation changes the openness angles of leaves and end leaf positions, said leaf window coverings include, but not limited to horizontal blinds, vertical blinds, and pleat window coverings characterized as having pleats, but no leaves, wherein the controlling operation expands/retreats all pleats and moves end pleats to new positions, said pleat window coverings include, but not limited to shades, curtains of different styles, valance and drape combination and window panels (See for example, Kaluza Figs 1-56).

Claim 3:

However, Yamauch, Cheiky and Kaluza further disclose the claim limitations that said motion detector, mounted on the rim of said flat monitor or a location on the wall which is close to said flat monitor, for detecting human position and movement in front of said flat monitor (see for example, Yamauchi column 7, 13-14, Cheiky Fig. 1).

Claim 4:

However, Yamauch, Cheiky and Kaluza further disclose the claim limitations that receiving a sequence of outdoor scene images by facing said controllable motor-driven video camera at a preset default direction; changing direction of sight of said controllable motor-driven video camera based on the sideward movement of a viewer in front of said flat monitor detected by said motion detector; and changing the zoom of said controllable motor-driven video camera based on the distance between a viewer to said flat monitor detected by said motion detector (see for example, Yamauchi column 7, 13-14, Cheiky Fig. 1).

Claim 5:

The claim 5 encompasses the same scope of invention as that of the claim 1 except additional claim limitation of an image processor. However, Yamauchi further discloses the claim limitation of an image processor (Yamauchi Figs. 4, 8 and 11; column 18).

Claim 6:

Yamauchi further discloses changes in said fixed window image, said window covering image, said static image and said sequence of segmented outdoor scene images cause reconstruction of said sequence of instant simulation images (column 21, lines 15-67; column 22, lines 15-30).

Claim 7:

Yamauchi further discloses selecting/reselecting of the window of user's preference from said window data, causing construction or reconstruction of said fixed window images and for interactively selecting/reselecting of the window covering of user's preference from said window covering data, causing construction or reconstruction of said window covering image (see for example, Yamauchi column 7, 13-14, Cheiky Fig. 1).

Claim 8:

Yamauchi further discloses that the color of curtains in the scenery setting and props may be changed according to the selected automatic backing style in which the user changes the backing style and therefore changes the color and the pattern of the curtains which reflects new openness of the simulated window covering changed by the user (column 21-22).

Claims 14, 16 and 18:

The claims 14, 16 and 18 are subject to the same rationale of rejection set forth in the claims 1-8.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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